



density image recording utilizing plural types of recording heads;  
Toshimitsu Danzuka, et al., 346/33A; 347/14, 19; 358/296, 503, 518 [IMAGE  
AVAILABLE]

(15) 5,228,021, Jul. 13, 1993, Multidisk player including a display that  
indicates titles and kinds of disks within the player; Hitoshi Sato, et  
al., 369/58, 32, 111, 124 [IMAGE AVAILABLE]

16. 5,138,162, Aug. 11, 1992, Method and apparatus for producing  
enhanced images of curved thermal objects; Michael Hacskeylo, 250/330;  
244/3.16; 356/364, 369 [IMAGE AVAILABLE]

(17) 4,989,195, Jan. 29, 1991, Disk recording/reproducing system using  
disk identification signal to retrieve stored control parameters; Tsutomu  
Suzuki, 369/50 [IMAGE AVAILABLE]

18. 4,398,279, Aug. 9, 1983, Digital display for dictation transcriber  
for indicating remaining tape within discrete segments of dictation;  
Theodore Titus, IV, et al., 369/58; 360/137; 369/27 [IMAGE AVAILABLE]

=> D HIS

(FILE 'USPAT' ENTERED AT 14:36:52 ON 22 JUL 1999)

L1 18 S (DETECT? OR DISTINGUISH? OR DETERMIN?) (5A) (DISK OR DISC  
OR

=> D L1 1-18

1. 5,903,531, May 11, 1999, Reproduction device for optical disks; Hiroharu Satoh, et al., 369/44.29, 54, 58, 94 [IMAGE AVAILABLE]
2. 5,881,322, Mar. 9, 1999, Electronic development type camera; Koichi Sato, 396/30 [IMAGE AVAILABLE]
3. 5,828,525, Oct. 27, 1998, Differential detection magnetoresistance head; Hitoshi Iwasaki, et al., 360/113 [IMAGE AVAILABLE]
4. 5,768,312, Jun. 16, 1998, Method and apparatus for evaluating digital transmission systems; Genichi Imamura, 375/228; 359/110; 375/224, 257; 455/67.7 [IMAGE AVAILABLE]
5. 5,761,169, Jun. 2, 1998, Methods and apparatus for recording to and reproducing from an optical master disc data to emulate the behavior of a reproducing only optical disc; Norichika Mine, et al., 369/84, 54, 58, 85 [IMAGE AVAILABLE]
6. 5,736,996, Apr. 7, 1998, Image reading apparatus with a function for correcting nonuniformity in recording density; Yoshihiro Takada, et al., 347/19, 16; 358/296 [IMAGE AVAILABLE]
7. 5,646,699, Jul. 8, 1997, CDP-incorporated television receiver which selects a signal based on a type of compact disk detected; Ji-byoung Oh, et al., 348/553, 563, 725, 730, 738 [IMAGE AVAILABLE]
8. 5,596,353, Jan. 21, 1997, Image reading apparatus with a function for correcting nonuniformity in recording density; Yoshihiro Takada, et al., 347/19, 14, 23 [IMAGE AVAILABLE]
9. 5,576,840, Nov. 19, 1996, Recording apparatus; Nobuo Fukushima, 386/46; 360/32; 386/109, 117 [IMAGE AVAILABLE]
10. 5,557,589, Sep. 17, 1996, Disc recording and/or reproducing apparatus that positions the magnetic head in response to a type of disc; Hiroshi Mukawa, et al., 369/13, 77.2 [IMAGE AVAILABLE]
11. 5,446,714, Aug. 29, 1995, Disc changer and player that reads and stores program data of all discs prior to reproduction and method of reproducing music on the same; Junichi Yoshio, et al., 369/48, 32, 36, 50, 58; 386/106 [IMAGE AVAILABLE]
12. 5,430,553, Jul. 4, 1995, Disc reproducing apparatus; Kousuke Misono, et al., 386/106 [IMAGE AVAILABLE]
13. 5,329,516, Jul. 12, 1994, Disk player with internal conveyor for exchanging stored disks; Masayuki Hoshi, et al., 369/77.1, 36, 75.1 [IMAGE AVAILABLE]
14. 5,276,459, Jan. 4, 1994, Recording apparatus for performing uniform

=> d 1-9

1. 5,657,182, Aug. 12, 1997, Casing of a magnetic recording and reproducing apparatus having rails for detachable mounting to a computer; Makoto Kuwamoto, et al., 360/97.01 [IMAGE AVAILABLE]
2. 5,614,279, Mar. 25, 1997, Recording and reproducing medium and a recording and reproducing apparatus; Makoto Kuwamoto, et al., 428/64.1; 369/112, 275.2, 275.4, 283; 428/64.2, 64.4, 64.5, 913; 430/270.12, 270.13, 495.1, 945 [IMAGE AVAILABLE]
3. 5,582,896, Dec. 10, 1996, Recording and reproducing medium and a recording and reproducing apparatus; Makoto Kuwamoto, et al., 428/141; 346/135.1; 369/275.2, 275.3, 275.4; 428/64.3, 64.4, 161, 163, 164, 167, 174, 332, 333, 457, 913; 430/945 [IMAGE AVAILABLE]
4. 5,331,613, Jul. 19, 1994, Data reproducing method and apparatus capable of shortening the total time of data reproduction for a plurality of reproduction requests; Naoki Yamada, 369/32; 395/825, 826 [IMAGE AVAILABLE]
5. 5,161,143, Nov. 3, 1992, Information recording-reproducing apparatus for optimizing data transfer; Yoshihisa Fukushima, et al., 369/53; 364/929; 369/32, 48; 379/88 [IMAGE AVAILABLE]
6. 5,132,947, Jul. 21, 1992, Combined memory medium, drive apparatus and method therefor and playback apparatus therefor; Keiichi Kameda, et al., 369/32; 356/52; 360/133; 369/75.1, 291 [IMAGE AVAILABLE]
7. 5,068,146, Nov. 26, 1991, Polymerized films, medium related members, and process for making; Masatoshi Nakayama, et al., 428/336; 427/488; 428/457, 900 [IMAGE AVAILABLE]
8. 4,988,573, Jan. 29, 1991, Medium related members; Masatoshi Nakayama, et al., 428/421; 427/488, 489; 428/422, 447, 463, 704 [IMAGE AVAILABLE]
9. 3,992,576, Nov. 16, 1976, Floating device for information disc apparatus; Yoshinori Sugiura, 369/44.15; 360/75, 103; 369/258 [IMAGE AVAILABLE]

12. 5,515,351, May 7, 1996, Method and apparatus for executing a CD playback setup operation in a CD player particularly suited to playback of partially recorded CDs; Yoshiya Nonaka, et al., 369/58, 44.27, 54 [IMAGE AVAILABLE]
13. 5,508,988, Apr. 16, 1996, Method and apparatus for reproducing information from a partially recorded recording medium; Yoshiya Nonaka, et al., 369/58, 32 [IMAGE AVAILABLE]
14. 5,473,584, Dec. 5, 1995, Recording and reproducing apparatus; Mitsuaki Oshima, 369/32, 47, 54 [IMAGE AVAILABLE]
15. 5,471,441, Nov. 28, 1995, CD player capable of playing back partially recorded CD; Yoshiya Nonaka, et al., 369/32, 47, 58 [IMAGE AVAILABLE]
16. 5,446,714, Aug. 29, 1995, Disc changer and player that reads and stores program data of all discs prior to reproduction and method of reproducing music on the same; Junichi Yoshio, et al., 369/48, 32, 36, 50, 58; 386/106 [IMAGE AVAILABLE]
17. 5,414,684, May 9, 1995, Method and apparatus for discriminating type of disks positioned on a CD player; Yoshiya Nonaka, et al., 369/47, 54, 58 [IMAGE AVAILABLE]
18. 5,257,253, Oct. 26, 1993, Laser vision disc with digital sound (LDD) disc player for reproducing analog audio signals mixed with digital audio signals; Hiroshi Otsubo, et al., 369/48; 360/27; 369/58; 386/97, 102, 105 [IMAGE AVAILABLE]
19. 5,228,021, Jul. 13, 1993, Multidisk player including a display that indicates titles and kinds of disks within the player; Hitoshi Sato, et al., 369/58, 32, 111, 124 [IMAGE AVAILABLE]

=> file

ENTER A FILE NAME OR (USPAT):jpoabs

FILE 'JPOABS' ENTERED AT 16:23:50 ON 23 JUL 1999

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* * * * *
*   J A P A N E S E   P A T E N T   A B S T R A C T S   *
*
* DATA IS LOADED THROUGH DECEMBER 24, 1996, FOR THE JAPANESE *
* PATENT OFFICE ABSTRACT (JPOABS) FILE. NEW RECORDS ARE NOT *
* BEING ADDED. PLEASE USE THE GPI-JPO FILE (JPO) WHICH IS *
* CURRENT THROUGH MARCH 31, 1999 (SEE BELOW). *
* * * * *
*   GLOBAL PATENT INFORMATION-JAPANESE PATENT OFFICE FILE *
*                               (GPI-JPO FILE) *
*
* THE FILE IS CURRENT THROUGH MARCH 31, 1999. *
* * * * *
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IRD CNOABS

=> d his

TOC data depending on the type being determined and reproduces an MD 13 using the edited TOC data to deliver a voice to a D/A converter 27. When the MD 13 can not be edited, the SC 23 edits the TOC data skeptically to reproduces the MD 13 using the edited TOC data and delivers an edited TOC data to an external **memory**. Consequently, edition work can be carried out even for an MD on which a new data can not be recorded and extension can be attained using an external **memory**.

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(FILE 'USPAT' ENTERED AT 16:16:24 ON 23 JUL 1999)  
L1 390 S (IDENTIFY? OR DISTINGUISH? OR DETECT? OR DETERMIN?) (2A) (  
DIS  
L2 366 S TOC(P) (MEMORY OR STORING OR STOREAGE)  
L3 423 S TOC(P) (MEMORY OR STORING OR STORAGE)  
L4 19 S L1 AND L3

FILE 'JPOABS' ENTERED AT 16:23:50 ON 23 JUL 1999

=> s 14

14062 IDENTIFY?  
5117 DISTINGUISH?  
622770 DETECT?  
120582 DETERMIN?  
87104 DISK  
30607 DISC  
142556 MEDIUM  
435825 TYPE  
62325 KIND  
101 (IDENTIFY? OR DISTINGUISH? OR DETECT? OR DETERMIN?) (2A) (DIS  
K O  
R DISC OR MEDIUM) (4A) (TYPE OR KIND)  
675 TOC  
233212 MEMORY  
103686 STORING  
180168 STORAGE  
230 TOC(P) (MEMORY OR STORING OR STORAGE)  
L5 1 L1 AND L3

=> d all

08-138352

May 31, 1996  
OPTICAL DISC DEVICE

L5: 1 of 1

INVENTOR: TETSUYA KATO  
ASSIGNEE: TEAC CORP  
APPL NO: 06-274094  
DATE FILED: Nov. 8, 1994  
PATENT ABSTRACTS OF JAPAN  
ABS GRP NO:  
ABS VOL NO:  
ABS PUB DATE:  
INT-CL: G11B 27/00; G11B 19/04; G11B 27/10

ABSTRACT:

PURPOSE: To obtain an optical disc device in which the **\*\*type\*\*** of a **disc** is **determined** and a decision is made whether the disc is recordable and a **TOC** data, stored in a **memory**, is edited and used skeptically when the disc is not recordable depending on the type of the disc to reproduce an MD.

CONSTITUTION: In the optical disc 11, **\*\*TOC\*\*** data in a **\*\*TOC\*\*** area of an MD 13 representative of the location for **storing** a digital data is entirely stored in a **memory** section 21 and an optical pickup 14 determines the type of a disc and makes a decision whether the disc is recordable. A system controller(SC) 23 controls each section to edit the

=> d his

(FILE 'USPAT' ENTERED AT 16:16:24 ON 23 JUL 1999)  
L1 390 S (IDENTIFY? OR DISTINGUISH? OR DETECT? OR DETERMIN?) (2A) (DIS  
L2 366 S TOC(P) (MEMORY OR STORING OR STOREAGE)  
L3 423 S TOC(P) (MEMORY OR STORING OR STORAGE)  
L4 19 S L1 AND L3

=> dd 14 1-19

'DD' IS NOT A RECOGNIZED COMMAND

=> d 14 1-19

1. 5,886,961, Mar. 23, 1999, Optical disk device capable of accessing a plural different types of optical disks; Tatsumaro Yamashita, et al., 369/34, 58 [IMAGE AVAILABLE]
2. 5,805,550, Sep. 8, 1998, Recording medium capable of recording a first data-type and a second data-type, playback method and playback device for playing back from the recording medium, and recording device for recording first-type data and second type data on the recording medium; Takashi Ohmori, 369/58, 32 [IMAGE AVAILABLE]
3. 5,778,257, Jul. 7, 1998, Multi-session disc-shaped for recording audio and computer data having disc type code area located in each session for recording common and particular disc type code; Shigeki Tsukatani, et al., 710/74; 369/275.3 [IMAGE AVAILABLE]
4. 5,742,575, Apr. 21, 1998, Method and device for identifying disc; Akio Yamakawa, et al., 369/58, 54, 109 [IMAGE AVAILABLE]
5. 5,699,331, Dec. 16, 1997, Apparatus operating with recording medium according to positional information of a secret code; Mitsuaki Oshima, 369/32, 47, 54 [IMAGE AVAILABLE]
6. 5,682,360, Oct. 28, 1997, Recording and reproducing apparatus for use with a recording medium having an optical recording layer and magnetic recording layer; Mitsuaki Oshima, 369/13; 360/59, 114 [IMAGE AVAILABLE]
7. 5,633,842, May 27, 1997, Disk selection control device for multidisk player; Junichi Nishida, et al., 369/32, 34 [IMAGE AVAILABLE]
8. 5,561,649, Oct. 1, 1996, Disk recording medium and reproduction method and apparatus thereof; Rae-hwan Lee, et al., 369/47, 32, 58 [IMAGE AVAILABLE]
9. 5,561,644, Oct. 1, 1996, Short seeking time optical disc apparatus; Masamichi Kondo, 369/32, 33, 47, 48, 50, 54 [IMAGE AVAILABLE]
10. 5,546,368, Aug. 13, 1996, Disk recording medium and reproduction method and apparatus thereof; Rae-hwan Lee, et al., 369/47, 32, 58 [IMAGE AVAILABLE]
11. 5,526,328, Jun. 11, 1996, Recording and reproducing apparatus with varying amounts of data in different tracks; Mitsuaki Oshima, et al., 369/13, 32 [IMAGE AVAILABLE]

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* THE FILE IS CURRENT THROUGH MARCH 31, 1999.
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IRD CNOABS

=> s 13

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        622770 DETECT?
        120582 DETERMIN?
          5117 DISTINGUISH?
          87104 DISK
          30607 DISC
        142556 MEDIUM
        435825 TYPE
          62325 KIND
            114 (DETECT? OR DETERMIN? OR DISTINGUISH?) (3A) (DISK OR DISC OR
MED      IUM) (4A) (TYPE OR KIND)
          2800 SERVER
            25 INTERNET
          2673 LAN
            90 WAN
          21116 LOCAL
        229102 AREA
          32179 NETWORK
            1095 LOCAL AREA NETWORK
              (LOCAL (W) AREA (W) NETWORK)
          53788 WIDE
        229102 AREA
          32179 NETWORK
            48 WIDE AREA NETWORK
              (WIDE (W) AREA (W) NETWORK)
L6      0 L1 AND L2

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